

MEDIA ADVISORY

Optronics Introduces Industry's First Temperature-Sensitive Heated LED Lighting Family with Full Lifetime Warranty

Highly efficient and microprocessor-controlled, Optronics' new heated LED lamps automatically monitor ambient temperature and turn heating functions on and off as weather conditions change.

TULSA, Okla., USA (Dec. 14, 2023) — [Optronics International](#), a leading manufacturer of vehicle harnesses, electronic control systems and LED lighting for the global transportation industry, announced the release of its TLL75 Series LED flood beam work lights and STL13 Series 4-inch round LED stop, turn, tail lights just in time for winter weather. The TLL75 Series LED flood beam work light is also being offered with an amber lens that is less reflective in snowy environments.

Some heated LED lighting units use resistors to heat themselves, and as long as the light is on, the lights continue to generate heat. Because heat affects LED lifespan, and because these lights are exposed to excess heat year-round, their service life can suffer and thus warranties are usually strictly limited.

“Unlike many other lamps that are constantly ‘cooking’ themselves to death, our heating technology only comes on when necessary,” said Dustin Smith, vice president of sales for Optronics. “Our lamps are smart, and our microprocessors are programmed to start heating only when temperatures begin dropping below 50 degrees Fahrenheit (10 degrees Celsius), in preparation for ice and snow, and as the environment warms again, they stop heating.”

Another unique feature of Optronics' new lamps is the way in which they actually heat. Most of the heated lamps on the market use filaments embedded in their lenses, much like a rear-window defroster. Optronics' heated lamps begin the heating process at the core of the lamp, at the level of the circuit board. The heat then emanates throughout the lamp, quickly warming the entire body of the lamp, including its housing.

“The tiny filaments many manufactures rely upon to heat their lenses can be easily damaged and, once compromised, will fail to defrost their lamps,” said Smith. “Just like Optronics' other lamps, our TLL75 Series LED flood beam work lights and STL13 Series 4-inch round LED stop, turn, tail lights employ a solid-state, surface-mount device (SMD) design that protects their electronics, including their heating elements, against moisture, shock and vibration.”

The lamps are designed to target commercial vehicles operating in a northern climate with harsh winters. In fact, Smith mused that Optronics had its first order come in from Canada before it even had the new heated lamp products on the shelf. Body builders, upfitters and aftermarket retailers with customers that contend with frigid weather now have a robust, reliable product with a lifetime warranty to offer them.

The TLL75 Series LED flood beam work light and STL13 Series 4-inch round LED stop, turn, tail light heat up quickly to melt ice and snow from their lenses and housings. In fact, performance results in environmental test chambers show rapid, whole-lamp heating. Starting at –22 degrees Fahrenheit, with 5 millimeters of ice on their lenses, the lamps heated to 3 degrees Fahrenheit after one minute, 43 degrees Fahrenheit after five minutes and 100 degrees Fahrenheit after 15 minutes.

The TLL75FHBB work light features a 4,500 raw lumen output and an effective lumen output of 2,800, while the TLL75AHBB work light offers a 2,300 raw lumen output and an effective lumen output of 2,000. Both lamps are IP69K rated and come with heavy-duty, powder-coated, die-cast aluminum housings and polycarbonate lenses and stainless steel mounting hardware. The lamps are compatible with 12- and 24-volt electrical systems and are available in bulk and polypack packaging.

The STL13 Series 4-inch round LED stop, turn, tail light features seven diodes and a polycarbonate lens with an ABS housing. The grommet-mounted light come with a PL-3 molded connection.

“We’re certainly not the first to offer a heated lamp, but no other lighting manufacturer has a heated LED lighting family with a no-hassle, one-diode lifetime warranty protection that will replace a lamp if even one diode fails,” Smith added.

The TLL75 Series LED flood beam work lights and STL13 Series 4-inch round LED stop, turn, tail lights are in stock and available for shipping immediately.

Optronics products are available in the U.S. and Canada through the company’s extensive [distribution network](#) of more than 30,000 convenient distribution locations. Users can access individual Optronics distributor websites by simply clicking on their logo icons. For information on international sales and distribution of Optronics products, please contact Dorian Drake at +1 (914) 697-9800, or visit <http://doriandrake.com>.

To view high-resolution product images of the new TLL75 Series LED flood beam work lights and STL13 Series 4-inch round LED stop, turn, tail lights, please visit <https://www.optronicsinc.com/RESOURCES/ImageGalleries/HeatedLens.aspx>.

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About Optronics

As the fastest-growing vehicle lighting and harness manufacturer in the U.S., Optronics International attributes its success to delivering better value, better options and better systems to its customers. Founded in 1972, Optronics International is a premier worldwide manufacturer and supplier of branded industrial and commercial vehicular safety lighting products and premium, custom electrical wiring harnesses for commercial vehicle applications. The company specializes in electrical system and harness design and interior and exterior LED and incandescent lighting for heavy-duty on- and off-highway vehicles, armored couriers, light- to medium-duty trailers, specialized vocational equipment, transit vehicles, RVs and marine equipment. The company’s patented USA-PLUS system provides the most advanced molded harness connections available in the market. The Optronics product catalog is among the most extensive in the industry. Optronics is headquartered in a 200,000-square-foot, ISO 9001-certified manufacturing, distribution, research and development facility on a 17-acre campus in Tulsa, Oklahoma. It has a 1,000,000-square-foot, IATF 16949-certified manufacturing facility in Annan District, Tainan, Taiwan. The company also has a manufacturing and distribution facility in Goshen, Indiana, and a wire harness manufacturing plant in Winnsboro, Texas. Learn more at <http://www.optronicsinc.com>.